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ABSTRACT

The Language Immersion Magnet (LIM) program was established in five San Diego (California) city schools to "immerse" students in a second language by providing a strong emphasis on basic academic skills taught in that language. The primary language--English--is introduced later (as late as grade 3). This study attempted to describe the program and determine the English academic skill level of 79 fifth graders enrolled in the Spanish immersion magnets at Horton and Longfellow, and in the French immersion magnet in Knox. A representative sample of 27 classrooms was used to include all grade levels. Data were collected via interviews with teachers, classroom observations, teacher surveys, and administration of the Comprehensive Tests of Basic Skills, Form U. It is recommended that: (1) clear and specific goals and objectives be drawn for the LIM project; (2) recruitment, selection, and placement of participants be continued as presently implemented; (3) teachers continue employing the techniques currently used within the program design; (4) the Second Language Education Office provide information and training in the area of second language acquisition to teachers and instructional aides; and (5) an evaluation study be conducted to examine achievement in both the primary and second language of LIM program participants. The LIM Program Interview Form 86-87, Observation Checklist, and Evaluation Project Survey and Survey Summary are appended. (TJH)

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EVALUATION REPORT OF THE LANGUAGE IMMERSION MAGNET PROJECT 1986-1987

Prepared by
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October 13, 1987

San Diego City Schools
Planning, Research, and Evaluation Division
Evaluation Department
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SAN DIEGO CITY SCHOOLS
Planning, Research, and Evaluation Division
Evaluation Department

EVALUATION REPORT OF THE LANGUAGE IMMERSION MAGNET PROJECT 1986-87

EXECUTIVE SUMMARY

I. ISSUE/CONCERN

Foreign language instruction provided in San Diego Unified School District elementary schools varies from site to site. Although schools are encouraged to offer foreign language instruction, the district has not adopted a common curriculum for this type of education (San Diego City Schools, 1987). However, a special foreign language program has been established in five San Diego city schools which "immerses" students in a second language by providing all instruction in that foreign language. This study was undertaken to describe the program as implemented, and to find out the academic skills level in English of the students enrolled in this Language Immersion Magnet (LIM) program.

At present, there is a strong interest to determine which approaches to teaching a foreign language are effective. Although in the U.S. there are almost as many approaches as there are schools (McLaughlin, 1985), the "bilingual" method, one in which the student's primary language (L1) is the medium of instruction and the second language (L2) is taught in special classes, seems to be used more extensively than others. This method has been studied and reported at length by various scholars (Baker,1981; Crawford,1986; Cummins,1974; Lambert,1972; Willig,1985). Another approach also being used is known as "immersion," where L2 is used as the language of instruction and L1 is introduced only after several years of "immersion" instruction. A number of studies have been conducted about various aspects of these immersion programs (Genesee,1979,1981; Lambert and Tucker,1972; Swain and Lapkin, 1981).

This latter approach to teaching a second language has been in operation in San Diego City Schools for approximately ten years, and is currently implemented at three elementary and two secondary schools. Two of the elementary schools teach in Spanish, and one in French. Both of the secondary schools teach their immersion classes in Spanish. The Language Immersion Magnet (LIM) projects, as they are called, were modeled after the French immersion programs which have been operating in Canada since the mid-sixties.

At San Diego, the LIM projects are designed to provide a strong emphasis on basic academic skills (reading, writing, mathematics, etc...) taught in the second language. The primary language, English , is introduced later (as late as the third grade in most cases) when some subjects are taught in that language.

II.
RECOMMENDATIONS

1. Clear and specific goals and objectives be drawn for the Language Immersion Magnet Program. The original planning document contains the basis for developing a guide in congruence with current practices.

2. Recruitment, selection, and placement of participants be continued as presently implemented.

3. Teachers continue employing the teaching techniques and strategies they are currently using. At the same time, they must continue keeping abreast of developments in the field of second language acquisition.

4. The Second Language Education Office provide information and training in the area of second language acquisition, through whatever means are available, to teachers and instructional aides. The training should include opportunities for both of these groups to enrich their second language skills.

5. An evaluation study be conducted to examine achievement in both the primary and second language of LIM participants. Students in the Spanish project sites can be tested with the La Prueba test currently in use in the district, and a suitable instrument can be found for the French students.

III.
RATIONALE

The focus of the Language Immersion Magnet Program at the sites visited during this evaluation process, has changed slightly from the original 1977 program design. Whereas the earlier philosophy had sought to develop persons who were humanities-oriented in their thinking and in their relationships with others, the current emphasis is on developing the second language skills of the participants. This is not to say, however, that students are not taught to recognize the value of the other culture and people as this relates to the language being studied. Additionally, the program promotes a balanced integration in the schools.

Selection and placement of participants for this program were conducted in accordance with guidelines set forth by the Magnet Schools and the Second Language Education Offices. Site resource teachers were actively involved in recruiting and placing students.

Based on the information gathered during the visits to the various sites, it was determined that the language immersion magnet projects were implemented in accordance with the design prescribed by the administering offices. In general, the classrooms followed the model as implemented in the Canadian schools. In grades K through 2 the second language (Spanish or French, depending on the site) was used as the means of instruction, and English was generally introduced at the third grade (as described in the Introduction section of this report).

Students in the early grades (K-3) had not yet developed enough L2 skills to communicate openly in that language. In the later grades (4-6), students were observed to be more fluent and used the L2 in almost all classroom interactions.

Teachers and instructional aides used second language acquisition techniques that have been reported in research studies as effective for teaching a second language. For example, they made every effort to encourage students to use the L2 to communicate, and did not reprimand nor chastise them for using their home language; spoke in simple sentences at a pace which made it easier for new learners to comprehend context; and generally established an atmosphere conducive to learning and acquiring a second language.

Two teachers, by modeling, were actually teaching students to use erroneous speech patterns. After hearing wrong tenses and unorthodox patterns during instructional activities, some students later imitated these utterances.

The physical separation of where a particular language was used for communication, and the fact that a different person taught each of the languages used, required students to use the L2 for interacting with others in the classroom, and therefore helped them to become more fluent in that language.

The progress of students was periodically monitored through conventional means, including observations, homework and tests. This practice allowed teachers to closely follow their pupils' academic and second language development. The role of the instructional aides was very important in this relation, for they were given the charge of tutoring those students who needed to work in certain identified areas.

Language immersion magnet students were as academically prepared as those students who received their instruction in English. Test data showed that, on the average, fifth-grade magnet students performed better than those district students to whom they were compared. These test results showed that LIM participants' academic skills did not diminish in any way.

Available longitudinal data for magnet students showed that their academic abilities, as far as can be attested by CTBS test results, generally improved for each of the five years presented.

The vast majority of students who have been enrolled in the LIM program do not continue their L2 education at Memorial Junior High or San Diego High School. From discussions with school officials, it seemed that location was a major obstacle to attracting LIM students to those sites.

IV.
BUDGET IMPLICATIONS/IMPACT ON SITES

Implementation of Recommendations 4 and 5 will require fiscal allocations. Sites will be impacted if Recommendation 5 is implemented because testing arrangements involving site personnel will have to be made.

EVALUATION REPORT OF THE LANGUAGE IMMERSION MAGNET PROJECT 1986-87

I. ISSUE/CONCERN

Foreign language instruction provided in San Diego Unified School District elementary schools varies from site to site. Although schools are encouraged to offer foreign language instruction, the district has not adopted a common curriculum for this type of education (San Diego City Schools, 1987). However, a special foreign language program has been established in a few San Diego city schools which "immerses" students in a second language by providing all instruction in that foreign language. This study was undertaken to describe the program as implemented, and to find out the academic skills level in English of the students enrolled in this Language Immersion Magnet (LIM) program.

Background

At present, there is a strong interest to determine which approaches to teaching a foreign language are most effective. Although in the U.S. there are almost as many approaches as there are schools (McLaughlin, 1985), the "bilingual" method, one in which the student's primary language (L1) is the medium of instruction and the second language (L2) is taught in special classes, seems to be used more extensively than others. This method has been studied and reported at length by various scholars (Baker,1981; Crawford,1986; Cummins,1981; Lambert,1972; Willig,1985). Another approach being used is known as "immersion," where L2 is used as the language of instruction and L1 is introduced only after several years of "immersion" instruction. A number of studies have been conducted about various aspects of these immersion programs (Genesee,1979,1981; Lambert and Tucker,1972; Swain and Lapkin, 1981).

This latter approach to teaching a second language has been in operation in San Diego City Schools for approximately ten years, and is currently implemented at three elementary and two secondary schools. Two of the elementary schools offer instruction in Spanish, and one in French. Both of the secondary schools provide their immersion classes in Spanish. The Language Immersion Magnet program was modeled after the French

immersion programs that have been operating in Canada since the mid-sixties. At San Diego, the LIM projects are designed to provide a strong emphasis on basic academic skills (reading, writing, mathematics) taught in the second language. The primary language, English , is introduced later (in the third grade in most cases) when some subjects are taught in that language. The following table depicts additional information about the use of English in the San Diego LIM program.

TABLE 1
USE OF ENGLISH IN SAN DIEGO LANGUAGE IMMERSION SCHOOLS

School	Grade Eng. first offered	Courses in English	Length of Eng. time/day	No. of Eng. Teachers
Horton	2	R, LA	60/75 min.	2
Knox	3	R, LA	60 min.	1
Longfellow	3	R, LA(1)	75 min.	3(2)

R--Reading LA--Language Arts
(1) New students take social studies and problem solving
(2) There also are three Basic Skills teachers

In addition to emphasizing communication and basic skills, the LIM projects feature various co-curricular programs. Depending on the school site, these may include programs for gifted students, instrumental orchestra, library media centers, computer labs, and special study trips to Mexico.

Program Goals

As mentioned earlier, the immersion project was established in San Diego City schools some ten years ago. The focus of the project when it was introduced in 1977 was somewhat different from what it is now. As expressed in the funding document (p.2), the original goal of the project was "to develop persons who were humanities-oriented in their thinking and in their relationships with others." The document further stated, however, that the project would "offer students the opportunity to leave school with greater linguistic and cultural skills .... than would be possible .... in a traditional educational program." This latter statement is more in

accord with the direction of the current LIM projects, as documented in this report where the projects are described in detail. The LIM program is also part of the district's integration efforts, and therefore has as a goal to promote properly balanced school populations.

Purposes of the Study

This study had three purposes: (1) to describe the LIM projects as implemented at each site, (2) to compare the reading, language and mathematics achievement of fifth-grade program participants with the achievement of fifth-grade students districtwide, as measured by the Comprehensive Tests of Basic Skills, Form U (CTBS/U), and (3) to determine the academic progress of a cohort group of fifth-grade LIM students. The underlying purpose was to determine whether the participants' English language skills, their L1, had been affected.

Evaluation Questions

This study sought to gather and analyze data which would provide answers to the following questions:

1. What are the program's goals?

2. How are program participants selected and placed?

3. What teaching strategies are used?

4. How is participants' progress monitored?

5. How is participants' academic achievement measured?

6. How does the performance of the fifth-grade minority* magnet participants on the CTBS/U compare to that of the fifth-grade minority students in the district?

7. How does the performance of the fifth-grade non-minority* magnet participants on the CTBS/U compare to that of the fifth-grade non-minority students in the district?

* As defined by Federal guidelines used by the district Magnet Schools Office. In this study, the minority group was composed of Hispanics and Blacks. The non-minority group consisted of students identified as White.

8. What has been the academic progress of a cohort group of fifth-grade students who have been in the program since first grade?

II.
METHODOLOGY

Description of Evaluation Methodology

Data for analysis were made available through (1) interviews with appropriate personnel, (2) classroom observations, and (3) the administration of a standardized test. Interviews and observations were used to gather basic information about program design and implementation. Several documents available from the Magnet Schools Office were reviewed for information regarding admission criteria. The CTBS/U provided reading,language, and mathematics test data about the participating students' academic performance.

Hypotheses Tested

This study collected and analyzed data which enabled the testing of the following hypotheses:

1. LIM projects in place are implemented in accordance with the design prescribed by the Magnet Schools Office and the Second Language Education Office.

2. The level of reading, language, and mathematics achievement of fifth-grade minority magnet participants on the CTBS/U is comparable to that of minority students in the district.

3. The level of reading, language, and mathematics achievement of fifth-grade non-minority magnet participants on the CTBS/U is comparable to that of non-minority students in the district.

4. The academic achievement of current fifth graders on the CTBS has increased from year to year since first grade.

Selection of Subjects

For the purpose of determining academic performance, the sample for this study consisted of 79 fifth-grade students enrolled in the Spanish

immersion magnets at Horton and Longfellow, and in the French immersion magnet at Knox. For the purpose of describing project implementation at each site, a representative sample of 27 classrooms was selected to include all grade levels.

Instrumentation

The formal means used to collect the information upon which this study was based were:

1. Interviews. Structured interviews were conducted to gather information about the collection of data for several phases of program implementation including student selection and placement, monitoring of student progress, and student achievement. Site personnel, three resource teachers, were interviewed by the evaluator. An instrument (Appendix A) was developed for this purpose and used by the interviewer.

2. Observations. Classroom visits provided information about actual implementation of the project including grouping, student-teacher interactions, and language of instruction. An observation instrument (Appendix B) was designed to accomplish this activity. The evaluator observed 27 classrooms at the three sites involved, and completed a total of 34 visits during the evaluation.

3. Survey. Additional information about the classrooms was collected through a seven-item survey given to all teachers. Information gathered from teachers included average number of students in class, means used for monitoring progress, and instructional materials. The survey (Appendix C) was developed by the evaluator and distributed by the appropriate site resource teacher.

4. CTBS/U. This standardized test of basic skills was administered by site personnel at the three sites to all present fifth-grade participants in the language immersion projects. Comparisons with other fifth-grade students in the district were possible because this particular grade is tested districtwide. The test was administered in accordance with Testing Department guidelines.

Data Processing and Analysis

Information gathered through interviews, observations, and a survey was analyzed and summarized by the evaluator. This summary is presented in narrative format in the Findings section of this report.

CTBS tests were scored by the district Data Systems Department, and results were analyzed by the evaluator. Test data are presented as percentiles and Normal Curve Equivalent scores (NCE's), and depicted in graphic form.

III.
FINDINGS

This section of the report will present findings addressing the evaluation questions posed in Section I of this document.

1. Immersion Magnet Program Goals

   As stated earlier, the goals of the project were first established by the original funding proposal written in 1977. Conversations with program administrators and teachers, and observations conducted by the evaluator, suggested that the goals of the program closely resemble those stated in that original document. In general, it may be stated that the goals are to provide a program that will prepare students to acquire the academic basic skills required for achievement at their appropriate grade level, to develop second language and related cultural skills, and to promote the balanced integration of San Diego City schools.

2. Selection and Placement of Participants

   Students selected for participation in this program met the criteria delineated in policies published by the district Magnet Schools Office. In general, students can apply for enrollment " as long as the student's transfer does not adversely affect the ethnic balance at minority isolated or minority imbalanced schools," (San Diego City Schools Magnet Programs brochure, 1987-88). Also, the students' primary language had to be English.

Although the parents of some students initiated enrollment procedures on their own, a large number of the students were actually recruited by the resource teachers. During this process, recruiters explained to parents and prospective pupils what the program was about, what would be expected of them, and what they could expect from enrolling in an imersion magnet. They were notified of special requisites, such as having to remain enrolled for at least a full semester and having to request, through a special process, to leave the program.

Resource teachers regarded the recruitment function as one of their most important charges. They found it to be an effective way to meet parents and students, and to ensure, to some extent, that the program is understood by both.

Once the student was accepted and enrolled, s/he was placed according to age/grade level. No special placement assessment was conducted, and student progress was monitored throughout the year by each teacher.

3. Teaching Strategies Used

In the discussion that follows, the terms primary and second language will be referred to as L1 and L2, respectively. In this study, L1 refers to English, and L2 to Spanish or French (when necessary, it will be specified whether the discussion is referring to Spanish or French). Also, the terms "magnet students" will be used to refer to LIM project students.

In most, if not all, of the classrooms observed students were divided into three groups. One group was led by the teacher, the instructional aide headed another, and a third worked independently. This is an arrangement similar to that prescribed in the district's Achievement Goals Program design, wherein groups rotate from teacher to independent work to aide.

Teachers and aides used an extensive array of instructional materials (Appendix D) including manipulatives of all kinds, flash cards, records, tapes, books, games, pictures, and computers. These were used by both teachers and aides, and by the students when they worked independently.

Teachers and aides used L2 when giving instructions and imparting knowledge, and although its use was emphasized at all times, students in the early grades did use English often when talking with the teacher and with each other. This observation is similar to what Lambert and Tucker (1972), and Genesee (1985) found in their research of Canadian immersion education programs. In studying the St. Lambert (Canada) school, Lambert and Tucker reported that children were not required to use the L2 (French) early in the program, and that students did in fact use the L1 (English) among themselves and with the teacher during this period. Genesee reported the same phenomenon occurring during his research in another Canadian program.

In the San Diego sample schools, students in the upper elementary grades (3-6) were observed using the L2 more fluently and with more frequency than those in the early grades. However, they generally reverted to English when they communicated with their peers. It was noted that although teachers and aides firmly requested students to use the L2, students were never reprimanded for using their primary language. This appeared to create a positive environment where students felt they were not being forced to do something beyond their capabilities. In fact, teachers created such an interesting environment that students wanted to learn the L2 so that they could get involved in what was transpiring. That type of setting is similar to what Terrell (1981) has described as an effective stage for language development.

Teachers used a technique which Krashen (1981) has termed "comprehensible input," and which he and other researchers (Long, 1983; Swain, 1984) have reported to be effective in immersion classrooms. In presenting subject matter, teachers generally modified their language in such a way as to make the message highly comprehensible. In other words, teachers used simple phrases, a slower-than-normal speech pace, and made an effort to make explanations related to the students' experiences.

Teachers and aides refrained from using English even when they saw that students needed extra explanation because they had not understood something. In those instances, teachers used their ingenuity in finding ways to explain by giving various examples, using hand and facial gestures, and body language.

As pointed out by Macnamara (1973), these approaches during instruction create an environment which basically has the same kinds of conditions that characterize the way a child learns a first language. Teachers, by providing interesting and at the same time meaningful communication, set a stage in which students desire to learn the L2, and eventually develop the necessary language skills to communicate. Thus, as was observed, most of the exercises had been purposefully planned to have the students be active participants.

Although most activities were centered around requiring the students to speak often, as in the Canadian immersion schools reported by Genesee (1983), and Lapkin and Cummins (1984), grammatical and communicative protocols were not emphasized. Little explicit teaching of grammar occurred during the first years of instruction (grades K-2). Grammar, in later grades (3-6) is taught as part of a formal language arts class.

Students were encouraged to express themselves at all times, and were seldom, if ever, corrected if they happened to make a "mistake." Rather than calling the student's attention to the "mistake," the teacher used the commonly-accepted form of what had been uttered, and then encouraged the student to repeat it. This approach appeared to encourage student participation by lessening whatever inhibitions they might have had. This practice was reported by Brown, et al. (1970), and Genesee (1985), who wrote that in the Canadian schools they studied, teachers were discouraged from overcorrecting the children's use of the language because error correction tended to disrupt the flow of communication.

An interesting occurrence was observed several times in two classrooms. Teachers, when using Spanish, tended to use literal translations from English; for example, one said "ojos conmigo" (eyes on me), a common expression used in English, but rarely, if ever, used in Spanish. Another one used "mano arriba," when requesting students to put a "hand up," instead of the common form used in Spanish, "levanten la mano." Other overheard expressions were "pienso que" (I think that), for "creo que," and "empujen el botón" (push the button), for "opriman el botón."

This modeling by the teacher might be transferred to the students who will eventually repeat these utterances. A case in point was observed when, in one classroom, a student was heard omitting some of the s endings of the plural forms in Spanish; it was later observed that the instructor pronounced those plural nouns in exactly that manner. In another case, a teacher probably accustomed to prefacing sentences with "so" in English, where it is perfectly acceptable, did the same in Spanish where it is not. Several of her students were heard prefacing their sentences with that word when they spoke Spanish.

It was also observed that, in a few instances, three of the teachers made grammatical errors during instruction. These errors were in tense usage, and in syntax; for example, "para que miran" (for them to see), for "para que miren," and "todavía es vivo él?" (does he still live?), for "todavía vive él?." For the most part, however, teachers and aides were excellent models who used the acceptable pronunciation and grammar structures of the L2.

Instructional aides were generally used for activities which involved imparting knowledge to students. These aides were observed during instructional activities, and their performance was thought to have been of high quality. Coordination existed between teacher and aide, and allowed the activities to be carried out in a smooth manner.

Development of the L2 was also enhanced by using a classroom assignment design whereby immersion students changed classrooms and teachers for the L1 and L2 parts of the school day. These "linguistic territories" (Genesee, 1984) require students to use the appropriate language at the appropriate time and place.

4. Monitoring of Students' Progress

Teachers reported using a variety of means to monitor the academic progress of their students. Among those most frequently mentioned were daily observations and reviews, and homework; additionally, teachers used tests (end-of-chapter, cumulative), worksheets, and AGP charts, where appropriate. Records of progress were maintained in checklists, charts, subject profiles, and record/grade books.

5. Measuring of Students' Academic Achievement

Students' achievement was measured in at least two ways: testing conducted by the teachers, and the yearly spring testing by the district testing department. Teacher-made tests and commercially-developed instruments were used as warranted by individual teachers. During the spring, students were tested with the CTBS/U as directed by the testing department. As previously indicated in the Instrumentation section of this report, only CTBS/U results are reported in this study.

6. Comparison of the Academic Performance of Fifth-Grade Minority Magnet Participants with that of 5th Grade Minority Students in the District

CTBS/U test scores of these fifth graders are presented below for school years 1985-1986 and 1986-1987 in Tables 2 and 3, respectively. Although this report was mainly concerned with the 1986-1987 school year, test results for 1985-1986 are presented as a matter of historical fact, and for comparison purposes. No observations were conducted nor data gathered regarding those students during the 1985-1986 school year.

As the data in Table 2 show, minority (Hispanic and Black) magnet students performed higher than their district counterparts in all three academic areas presented here. In reading, the minority magnet students outscored the district group by an average of 7 percentile points, and in language by 8 points. In mathematics, where language proficiency is not as crucial, the difference was 4 percentile points in favor of the magnet pupils. These results are of interest when two important facts are considered: first, that the instrument (CTBS/U) used to measure the academic achievement is in English; and second, that magnet students generally do not receive formal subject matter instruction in English until the third grade.

These findings are congruent with those by Genesee (1985) and Swain (1984) regarding Canadian immersion schools, and with the research conducted by Cohen (1974) in Culver City, California. In their studies, these researchers concluded that although immersion students initially (grades K-2) lagged behind in their English-language development,

within a year or so after receiving English language arts instruction they performed as well as students who had been educated in all-English environments.

Additionally, Genesee determined that immersion students attained high levels of second language proficiency without risk to their native language development or their academic achievement.

TABLE 2
CTBS/U TOTAL READING, LANGUAGE, AND MATHEMATICS
MEAN SCORES OF FIFTH GRADE LIM &
DISTRICT MINORITY STUDENTS
SPRING 1986

Group	N	Percentile	N C E
TOTAL READING			
Magnet	71	41	45
District	2640	34	41
TOTAL LANGUAGE			
Magnet	71	46	48
District	2631	38	44
TOTAL MATHEMATICS			
Magnet	71	49	49
District	2631	45	47

Table 3 depicts the spring 1987 mean test scores of magnet minority students. As the data show, the magnet students surpassed the district fifth graders in the three areas presented, outscoring them by an average of 12 percentile points in reading, 11 in language, and 15 in

mathematics. These results substantiate the previous year's findings, i.e., minority students in language immersion magnet schools tend to do as well as, and in some cases better than, those who are in all-English classrooms.

TABLE 3
CTBS/U TOTAL READING, LANGUAGE, AND MATHEMATICS
MEAN SCORES OF FIFTH GRADE LIM 5 &
DISTRICT MINORITY STUDENTS
SPRING 1987

Group	N	Percentile	N C E
TOTAL READING			
Magnet	43	49	49
District	2755	37	43
TOTAL LANGUAGE			
Magnet	43	50	50
District	2740	39	44
TOTAL MATHEMATICS			
Magnet	43	62	56
District	2744	47	48

7. Comparison of the Academic Performance of Fifth-Grade Majority Magnet Participants with that of 5th Grade Majority Students in the District

CTBS/U test results of these fifth graders are presented below for school years 1986 and 1987 in Tables 4 and 5, respectively. As pointed

out above, data for 1986 are presented here for comparison purposes although no observations or student information were gathered during that year.

As the data presented in Table 4 show, the magnet majority students outscored the district majority students in reading, language, and mathematics. The difference in reading scores was three percentile points, as it was in mathematics; in language, however, the difference was more salient (eleven percentile points).

TABLE 4
CTBS/U TOTAL READING, LANGUAGE, AND MATHEMATICS
MEAN SCORES OF FIFTH GRADE LIM 5 &
DISTRICT MAJORITY STUDENTS
SPRING 1986

Group	N	Percentile	N C E
TOTAL READING			
Magnet	41	70	61
District	3308	67	59
TOTAL LANGUAGE			
Magnet	41	76	65
District	3293	65	58
TOTAL MATHEMATICS			
Magnet	41	78	66
District	3295	75	64

Although this study was not intended to compare minority with majority students, it is interesting to note that the magnet and district majority students achieved higher percentile levels than their counterparts. This reflects what has been documented in other Evaluation Department reports, i.e., that districtwide, majority students outperform minority students.

TABLE 5
CTBS/U TOTAL READING, LANGUAGE, AND MATHEMATICS
MEAN SCORES OF FIFTH GRADE LIM &
DISTRICT MAJORITY STUDENTS
SPRING 1987

Group	N	Percentile	N C E
TOTAL READING			
Magnet	36	71	62
District	3331	60	59
TOTAL LANGUAGE			
Magnet	36	81	68
District	3325	65	58
TOTAL MATHEMATICS			
Magnet	36	78	66
District	3314	75	64

As the results show in Table 5, magnet majority students surpassed the district majority students in all three categories reported here. An interesting aspect of these results is that the magnet pupils'

performance in the two areas where one would not expect them to do well, namely reading and language, were the two in which they did best. As reported above, these students do not receive English language arts instruction until they are in third grade, and would not therefore be expected to perform as well as those students who are taught in English as early as kindergarten. However, these data show what Cohen (1974), Genesee

(1985) and others have reported in their research, i.e., that shortly after receiving English language arts instruction for the first time, immersion students perform as well as students who have attended regular English language programs.

8. Academic Progress of all Fifth-Grade Students Who Have Been in the Program Since First Grade

Data were gathered for students who were tested in the 1987 spring and who had been enrolled in the LIM program since first grade. There were fifty-five students for whom test information was available for the last five years. Test results for a group of magnet pupils are presented in Table 6.

TABLE 6
CTBS/U TOTAL READING, LANGUAGE AND MATHEMATICS
MEAN SCORES OF A COHORT GROUP
OF FIFTY-FIVE FIFTH GRADE LIM STUDENTS

Grade	Reading		Language		Mathematics	
	%ile	NCE	%ile	NCE	%ile	NCE
1	19	32	24	35	60	55
2	32	40	24	35	67	59
3	44	50	50	50	69	60
4	54	52	69	60	70	61
5	57	54	66	59	72	62

As the data in the table above show, this group of fifty-five students progressed each year in every area except in language at the end of grade five. The language test requires the student to know the proper usage of capital letters and punctuation marks, and to have an understanding of skills used in written expression. Since these students did not receive English language arts until the third grade, they apparently had not yet internalized some of the mechanics of the English language. On the other hand, they had developed the necessary vocabulary and comprehension skills to improve their total reading scores from year to year.

It is of interest to note that although the currently available data on LIM students show their academic success, only a very small number of these students continue their second language education. In the 1986-87 school year, 16 immersion students enrolled at Memorial Junior High, and 17 at San Diego High School. In discussions with school officials, it was found that the location of these schools, and parent preference were strong determinants for selecting where the students would attend school.

IV.
CONCLUSIONS

The focus of the Language Immersion Magnet Program at the sites visited during this evaluation process, has changed slightly from the original 1977 program design. Whereas the earlier philosophy had sought "to develop persons who were humanities-oriented in their thinking and in their relationships with others," the current emphasis is on developing the second language skills of the participants. This is not to say, however, that students are not taught to recognize the value of the other culture and people as this relates to the language being studied. Additionally, the program promotes a balanced integration of the schools.

Selection and placement of participants for this program were conducted in accordance with guidelines set forth by the Magnet Schools and the Second Language Education Offices. Site resource teachers were actively involved in recruiting and placing students.

Based on the information gathered during the visits to the various sites, it was determined that the language immersion magnet projects were implemented in accordance with the design prescribed by the

administering offices. In general, the classrooms followed the model as implemented in the Canadian schools, whereby in grades K through 2 the second language (Spanish or French, depending on the site) was used as the means of instruction, and English was generally introduced at the third grade (as described in the Introduction section of this report).

Students in grades K-3 did not have sufficient L2 skills to openly communicate in that language. In the later grades (4-6), students were more fluent and used the L2 in almost all classroom interactions.

Teachers and instructional aides used second language acquisition techniques that have been reported in research studies as effective for teaching a second language. For example, they made every effort to encourage students to use the L2 to communicate, did not reprimand nor chastise them for using their home language, spoke in simple sentences at a pace which made it easier for new learners to comprehend context, and established an atmosphere conducive to acquiring a second language.

Two teachers, by modeling, were actually teaching students to use erroneous speech patterns. After hearing wrong tenses and unorthodox patterns during instructional activities, some students later imitated these utterances.

The physical separation of where a particular language was used for communication, and the fact that a different person taught each of the languages used, required students to use the L2 for interacting with others in the classroom, and therefore helped them to become more fluent in that language.

The progress of students was periodically monitored through conventional means, including observations, homework and tests. This practice allowed teachers to closely follow their pupils' academic and second language development. The role of the instructional aides was very important in this relation, for they were given the charge of tutoring those students who needed to work in certain identified areas.

Language immersion magnet students were as academically prepared as those students who received their instruction in English. Test data showed that, on the average, fifth-grade magnet students performedbetter than those district students to whom they were compared. These

test results showed that LIM participants' academic skills in English did not diminish in any way. Generalizations about these findings must be made with caution since the number of students involved in this study is small.

Available longitudinal data for magnet students showed that their academic achievement, as far as can be attested by CTBS test results, generally improved for each of the five years presented.

The vast majority of students who have been enrolled in the LIM program do not continue their L2 education at Memorial Junior High or San Diego High School. From discussions with school officials, it seemed that location was a major obstacle to attracting LIM students to those sites.

V.
RECOMMENDATIONS

Based on the findings and conclusions reported in previous pages of this document, it is recommended that:

1. Clear and specific goals and objectives be drawn for the Language Immersion Magnet Program. The original planning document contains the basis for developing a guide in congruence with current practices.

2. Recruitment, selection, and placement of participants be continued as presently established.

3. Teachers continue employing the teaching techniques and strategie they are currently using, and keep abreast of developments in the field of second language acquisition.

4. The Second Language Education Office provide information and training in the area of second language acquisition, through whatever means are available, to teachers and instructional aides. The training should include opportunities for both of these groups to enrich their second language skills.

5. An evaluation study be conducted to examine achievement in both the primary and second language of LIM participants. Students in the Spanish project sites can be tested with the La Prueba test currently in use in the district, and a suitable instrument can be found for the French students.

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APPENDIX A

Language Immersion Magnet Program
Interview Form 1986-87

LANGUAGE IMMERSION MAGNET PROGRAM
INTERVIEW FORM 86-87

1. Describe the **selection-assessment-placement-monitoring** process used for project participants.

   A. Selection:

   B. Assessment:

   C. Placement:

   D. Monitoring:

2. Meetings with project staff (teachers & aides):

   A. How often:

   B. Substance of meetings:
      1. informative 2. sharing ideas 3. hearings (problems/complaints)
      4. other:

3. Describe your role as Resource Teacher:

4. Some of the major strengths of the project are:

5. Some of the major weaknesses of the project are:

6. Other comments:

FC/4-6-87

APPENDIX B

Language Immersion Magnets
Observation Checklist

SAN DIEGO UNIFIED SCHOOL DISTRICT
LANGUAGE IMMERSION MAGNETS
OBSERVATION CHECKLIST

School: _____ Teacher: _____

Grade: _____ Date _____ Observer: _____

1. Number of students in the room: ____ 2. Is there an aide? Y N

Description of Activities

*Activity 1/Group 1: _____

_____

_____

_____

Group 2: _____

_____

_____

_____

Group 3: _____

_____

*Activity 2/Group 1: _____

_____

_____

_____

Group 2: _____

_____

APPENDIX C

Language Immersion Magnet Evaluation Project Survey

LANGUAGE IMMERSION MAGNET EVALUATION PROJECT

SURVEY

1. School: _____ Grade: _____ Date: _____

2. Average number of students in your class: _____

3. If there is an aide in your classroom, what is the average number of hours per week s/he is in? _____ hours/week

4. What means do you use to monitor student progress?

   Homework ( ) If so, how often do you give it? _____ times/week

   Tests ( ) Type: _____

   Other: _____

5. What means do you use to record student progress?

   Charts ( ) Record book ( ) Other: _____

6. Please list materials used for instructional purposes:

   1. 4.

   2. 5.

   3. 6.

7. Comments about the Language Immersion Magnet Program you would like to make:

_____

_____

_____

APPENDIX D

Language Immersion Magnet Evaluation Project
Survey Summary

Language Immersion Magnet Evaluation Project
Survey Summary

1. Average number of students in class by grade:

K = 27	4 = 27
1 = 28	5 = 28
2 = 28	6 = 27
3 = 28	English = 19

2. Average number of hours aide was available per week: 29.6 hrs/wk

3. Means used to monitor student progress: daily review, work sheets, homework, tests, observations, AGP progress charts, writing samples.

4. Means used to record student progress: record books, charts, checklists, subject profiles.

5. Materials used for instruction by grade:

   K = Records, tapes, games, manipulatives, Peabody kit, ELEPS, Houghton Mifflin math, Silver Burdett science, El Mundo y Su Gente.

   1 = Computers, films, manipulatives, Economy books, Nestor booklets, AGP, Math Their Way, Silver Burdett social studies and science, SDC R & HR, records, tapes, puppets, musical instruments.

   2 = Houghton Mifflin (Economy, Math), puppes, films, records, books in French such as La Mathematique a L'Elémentaire.

   3 = Films, Silver Burdett science and social studies, district math materials, manipulatives.

   4 = Films, tapes, manipulatives.

   5 = Computer, TV, video camera, VCR.

   5/6 = Houghton Mifflin (economy, math, reading), Silver Burdett science and social studies, Escribe Con Cuento.

5/6 French - La Mathematique a L'Elémentaire, L'affaire de Trois Coupables, Le Passé Vivant de la France, Contes d'ivoire.

English 2/3 - Houghton Mifflin, AGP, MacMillan Language, ELEPS.

English 4/5/6 - AGP, Literature Series books, Shakeaspeare for Children.

6. Comments:

It's a very rewarding program because immersion works so well at this age.

It's a demanding program for teachers, students, and parents.

If there were less children in the classes they would learn faster.

Many teachers don't understand immersion methodology.

We need a lot of materials, especially quality materials in Spanish in social studies.

Poor reading program-- it doesn't teach comprehension.

I'm proud to be part of the Knox French program. It's exciting for myself and the children.

It works-- We make it work!

I'd like to see more cultural programs (artists, dancers) to motivate the students.

I feel it's an excellent program for average and above students.

Outstanding program for student progress and achievement-- very demanding for teachers!

The strength of the program depends in great part on the expertise and creativity of the teacher.